

**DETAILED ACTION**

***Claim Status***

1. Claims 1-7, 10, 13-15, 19-20, and 23-27 are pending.

***Claim Rejections - 35 USC § 112***

2. Prior rejection directed to claim 20 is withdrawn.

***Claim Rejections - 35 USC § 101***

3. Regarding claim 20, this claim recites a “computer-readable storage medium”. Applicant’s have indicated that support for computer-readable storage medium is on page 5 of the specification as the server, and has indicated that this is a hardware device (see remarks page 14). In the absence of any modifying disclosure of this limitation in the specification, the examiner interprets the terms 'computer-readable storage medium' as excluding printed paper, transmission media, signals, or any form of energy, such that the claim clearly falls within a statutory class of invention as required under the terms of 35 U.S.C. 101.

***Examiner’s Amendment***

4. An examiner’s amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

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5. Authorization for an examiner's amendment was given in a telephone interview with Ms. Rita Rooney (reg. 30, 585) on September 1, 2009.

6. **In the claims:**

Claims 1-7, 13-15, 19-20, and 23-26 have been amended. Claim 27 has been added. Claims 8-9, 11-12, 16-18, and 21-22 have been cancelled. Please replace all prior claims with the claims below.

1. (currently amended)

A method of operating a profile group managing server for managing a computer information database comprising:

A. determining, by said profile group managing server, a multiple node tree structure of groups for a set of computers, in which each node is a group level and a top level is a root, based on primary grouping criteria and secondary grouping criteria that correspond to selected computer profile data for each computer, said computer profile data including one or more of hardware and software configuration, hot fixes, user defined entries and performance data;

B. specifying in a group mapping table in the computer information database, one or more fields for the primary grouping criteria and one or more fields for the secondary grouping criteria wherein said secondary grouping criteria ~~[[may be]]~~ is unrelated or related to said primary grouping criteria, and including in ~~[[those]]~~ the one or more fields of the primary grouping criteria and secondary grouping criteria, in respective table records of the group mapping table, values corresponding to the selected computer profile data that are utilized in the

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primary grouping criteria and the secondary grouping criteria with the values associated with either or both of the primary grouping criteria and the secondary grouping criteria being ranges that extend between a selected high value and a selected low value[[s]],

wherein said ranges are inclusive and include the high value, the low value, and values there between, wherein said values there between include all values that are less than the high value, but greater than the low value,

wherein said ranges are inclusive and include the high value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value,

wherein said ranges are inclusive and include the low value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value, or

wherein said ranges are inclusive and only include values there between, wherein said values there between include all values that are less than the high value, but greater than the low value;

C. further specifying, in the respective table records, information that identifies [[the]] groups to which the computers that satisfy the primary grouping criteria and the secondary grouping criteria are assigned;

D. receiving, at said profile group managing server, from each computer in the set of computers, for inclusion in the database, computer profile data from [[a plurality]]the set of computers;

E. for the computer profile data received from a given computer, the profile group managing server performs the following:

extracting the selected computer profile data that are utilized in the primary grouping[[s]] criteria and the secondary grouping[[s]] criteria,

querying the group mapping table to determine if the extracted computer profile data correspond to or fall within the ranges of the [[respective]] values that are included in the one or more fields of the primary grouping criteria [[fields]] and the one or more fields of the secondary grouping criteria [[fields]] in any of the records in the group mapping table,

and

if [[the]] the querying provides query results [[in]]with no records, assigning the computer to a default group,

if the querying provides query results [[in]]with one table record, assigning the computer to the group that is named in the record,

if the querying provides query results [[in]]with multiple table records that include a secondary low value[[s]], assigning the computer to the group that is named in the record that is in a first predetermined position in [[the]]an order in which the records are returned, or

if the querying provides query results [[in]] with multiple records and there [[are]]is no corresponding secondary low value[[s]] in the records, assigning the computer to the group that is named in the record that is in a second predetermined position in [[the]]an order in which the records are returned; and

F. manipulating the computer profile data from the database and producing, for a selected group level, reports that contain summaries of certain or all of the attributes of the computers that are in the selected group level or below in the multiple node tree structure.

2. (currently amended) The method of claim 1 wherein one or more table records includes secondary grouping criteria values set to NULL.

3. (currently amended) The method of claim 1 wherein the [[respective]] values associated with the primary grouping criteria are ranges and the step of determining if the extracted data correspond to the [[respective]] values further includes determining if the corresponding extracted data falls below a high limit and above a low limit of the primary grouping ranges.

4. (currently amended) The method of claim 3 wherein the values associated with the secondary grouping criteria are ranges and the step of determining if the extracted data correspond to the values further includes determining if the corresponding extracted data [[of interest]] falls below a high limit and above a low limit of the [[within one of the]] secondary grouping ranges.

5. (currently amended) The method of claim 1 wherein the querying further comprises determining if the extracted data corresponds to the primary grouping criteria and a secondary low value of NULL or [[the]]an empty string.

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6. (currently amended) The method of claim 1 wherein the primary grouping criteria and the secondary grouping criteria correspond to user-specified values of the selected computer profile data.

7. (Currently Amended)

~~A method of operating a profile group managing server for managing a computer information database comprising:~~

~~A. determining, by said profile group managing server, a multiple node tree structure of groups for the computers, in which each node is a group level, and a top level is a root, based on primary grouping criteria that correspond to ranges of values of selected computer profile data for each computer, said computer profile data including one or more of hardware and software configuration and performance data;~~

~~B. specifying in a group mapping table in the computer information database, fields for the ranges of values of the selected computer profile data that are the primary grouping criteria, wherein said ranges are inclusive and include a selected high value, a selected low value, and values there between, wherein said values there between include all values that are less than the high value, but greater than the low value;~~

~~C. further including, in the table records, information that identifies the groups to which the computers that satisfy the primary grouping criteria are assigned;~~

~~D. receiving, at said profile group managing server, from each computer in the set of computers, for inclusion in the database, computer profile data for that particular computer;~~

~~E. for the profile data received from a given computer, the profile group managing server performing the following:~~

~~extracting the selected profile data that is utilized in the primary grouping;~~

~~querying the group mapping table to determine if the extracted data fall within the ranges of values that are included in the primary grouping fields in any of the table records; and~~

~~if the query results in no records, assigning the computer to a default group;~~

~~if the query results in one table record, assigning the computer to the group that is named in the record, or~~

~~if the query results in multiple table records, assigning the computer to the group that is named in the record that is in a first predetermined position in the order in which the records are returned; and~~

~~F. manipulating the computer profile data from the database and producing, for a selected group level, reports that summarize the attributes of the computers that are in the selected group level or below in the tree.~~

A system of operating a profile group managing server for managing a computer information database comprising:

a processor and memory;

the memory having computer instructions configured to:

A. determining, by said profile group managing server, a multiple node tree structure of groups for a set of computers, in which each node is a group level and a top level is a root, based on primary grouping criteria and secondary grouping criteria that correspond to selected computer profile data for each computer, said computer profile data including one or more of hardware and software configuration, hot fixes, user defined entries and performance data;

B. specifying in a group mapping table in the computer information database, one or more fields for the primary grouping criteria and one or more fields for the secondary grouping criteria wherein said secondary grouping criteria is unrelated or related to said primary grouping criteria, and including in the one or more fields of the primary grouping criteria and secondary grouping criteria, in respective table records of the group mapping table, values corresponding to the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria with the values associated with either or both of the primary grouping criteria and the secondary grouping criteria being ranges that extend between a selected high value and a selected low value,

wherein said ranges are inclusive and include the high value, the low value, and values there between, wherein said values there between include all values that are less than the high value, but greater than the low value,

wherein said ranges are inclusive and include the high value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value,



wherein said ranges are inclusive and include the low value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value, or

wherein said ranges are inclusive and only include values there between, wherein said values there between include all values that are less than the high value, but greater than the low value;

C. further specifying, in the respective table records, information that identifies groups to which the computers that satisfy the primary grouping criteria and the secondary grouping criteria are assigned;

D. receiving, at said profile group managing server, from each computer in the set of computers, for inclusion in the database, computer profile data from [[a plurality]]the set of computers;

E. for the computer profile data received from a given computer, the profile group managing server performs the following:

extracting the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria,

querying the group mapping table to determine if the extracted computer profile data correspond to or fall within the ranges of the values that are included in the one or more fields of the primary grouping criteria and the one or more fields of the secondary grouping criteria in any of the records in the group mapping table,  
and

if the querying provides query results with no records, assigning the computer to a default group,

if the querying provides query results with one table record, assigning the computer to the group that is named in the record,

if the querying provides query results with multiple table records that include a secondary low value, assigning the computer to the group that is named in the record that is in a first predetermined position in an order in which the records are returned, or

if the querying provides query results with multiple records and there is no corresponding secondary low value in the records, assigning the computer to the group that is named in the record that is in a second predetermined position in an order in which the records are returned; and

F. manipulating the computer profile data from the database and producing, for a selected group level, reports that contain summaries of certain or all of the attributes of the computers that are in the selected group level or below in the multiple node tree structure.

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) The method of claim 1 wherein the first predetermined position in the order of the records is the first record found and the second predetermined position in the order

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of records is the last record found.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The method of claim 1 wherein the assigning further comprises re-grouping the set of computers in groups in accordance with different user-specified primary and secondary grouping criteria by altering the ranges.

14. (Currently Amended) The method of claim 1 wherein the assigning further comprises grouping the set of computers in groups in accordance with primary grouping criteria and secondary grouping criteria that correspond to computer profile data that represents selected physical locations of users.

15. (Currently Amended) The method of claim 1 wherein the assigning further comprises re-grouping the set of computers in groups in accordance with primary grouping criteria and secondary grouping criteria that correspond to computer profile data that represents selected structures within the underlying organization of users.

16. (Cancelled)

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17. (Cancelled)

18. (Cancelled)

19. (Currently Amended) The method of claim\_1 wherein ~~[[grouping]]~~ the assigning further comprises re-grouping the ~~[[plurality]]~~set of computers in groups in accordance with primary grouping criteria and secondary grouping criteria that correspond to other selected structures within the underlying organization of a company.

20. (Currently Amended) ~~A computer-readable storage medium embodying a profile group managing server having stored thereon and running profile group managing software for executing a method of managing a database by executing instructions for performing the steps comprising:~~

~~A. collecting, at a profile group managing server, profile data for a given computer in a set of computers, into the database;~~

~~B. grouping the computers into a specified tree structure of groups in the database in which each node of the tree is a group level, and a top level is a root, based on primary and secondary grouping criteria that correspond to respective values of selected computer profile data with the values associated with either or both of the primary grouping criteria and the secondary grouping criteria being ranges that extend between a selected high value and a selected low~~

values, wherein said ranges are inclusive and include the high value, the low value and values there between wherein said values there between include all values that are less than the high value, but greater than the low value;

C. for the profile data received from a given computer, the profile group managing server performs the following:

- extracting the selected profile data that are utilized in the primary groupings and the secondary groupings;

- querying the group mapping table to determine if the extracted profile data correspond to or fall within the ranges of the respective values that are included in the primary grouping fields and the secondary grouping fields in any of the records in the table, and

- if the query results in no records, assigning the computer to a default

- if the query results in one table record, assigning the computer to the group that is named in the record;

- if the query results in multiple table records that include secondary low values, assigning the computer to the group that is named in the record that is in a first predetermined position in the order in which the records are returned, or

- if the query results in multiple records and there are no corresponding secondary low values in the records, assigning the computer to the group that is named in the record that is in a second predetermined position in the order in which the records are returned; and maintains the group information in the database;

~~D. manipulating the data in the database to produce reports that summarize the attributes of the computers in a given group level and the levels below on the tree; and~~

~~E. providing the reports to a user.~~

A computer-readable storage medium embodying a profile group managing server having stored thereon and running profile group managing software for executing a method of managing a database by executing instructions by a processor for performing the method comprising:

A. determining, by said profile group managing server, a multiple node tree structure of groups for a set of computers, in which each node is a group level and a top level is a root, based on primary grouping criteria and secondary grouping criteria that correspond to selected computer profile data for each computer, said computer profile data including one or more of hardware and software configuration, hot fixes, user defined entries and performance data;

B. specifying in a group mapping table in the computer information database, one or more fields for the primary grouping criteria and one or more fields for the secondary grouping criteria wherein said secondary grouping criteria is unrelated or related to said primary grouping criteria, and including in the one or more fields of the primary grouping criteria and secondary grouping criteria, in respective table records of the group mapping table, values corresponding to the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria with the values associated with either or both of the primary grouping criteria and the secondary grouping criteria being ranges that extend between a selected high value and a selected low value,

wherein said ranges are inclusive and include the high value, the low value, and values there between, wherein said values there between include all values that are less than the high value, but greater than the low value,

wherein said ranges are inclusive and include the high value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value,

wherein said ranges are inclusive and include the low value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value, or

wherein said ranges are inclusive and only include values there between, wherein said values there between include all values that are less than the high value, but greater than the low value;

C. further specifying, in the respective table records, information that identifies groups to which the computers that satisfy the primary grouping criteria and the secondary grouping criteria are assigned;

D. receiving, at said profile group managing server, from each computer in the set of computers, for inclusion in the database, computer profile data from the set of computers;

E. for the computer profile data received from a given computer, the profile group managing server performs the following:

extracting the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria,

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querying the group mapping table to determine if the extracted computer profile data correspond to or fall within the ranges of the values that are included in the one or more fields of the primary grouping criteria and the one or more fields of the secondary grouping criteria in any of the records in the group mapping table,

and

if the querying provides query results with no records, assigning the computer to a default group,

if the querying provides query results with one table record, assigning the computer to the group that is named in the record,

if the querying provides query results with multiple table records that include a secondary low value, assigning the computer to the group that is named in the record that is in a first predetermined position in an order in which the records are returned, or

if the querying provides query results with multiple records and there is no corresponding secondary low value in the records, assigning the computer to the group that is named in the record that is in a second predetermined position in an order in which the records are returned; and

F. manipulating the computer profile data from the database and producing, for a selected group level, reports that contain summaries of certain or all of the attributes of the computers that are in the selected group level or below in the multiple node tree structure.



21. (Cancelled)

22. (Cancelled)

23. (currently amended) The method as defined in [[C]]claim 1 wherein said hardware component information includes one or more of manufacturer, system BIOS (basic input/output system), CPU (computer processing unit), bus, memory, hard disks, local and shared, logical and physical, tape drives, video cards, sounds cards, printers, network and operating systems.

24. (currently amended) The method as defined in [[C]]claim 1 wherein said software version information about applications includes one or more of manufacturer, product name, version number and install directory and said performance data includes one ore more of network activity, CPU (computer processing unit) utilization, number of reboots, and hard drive SMART (Self-monitoring, Analysis and Reporting Technology) failures.

25. (currently amended) The method as defined in claim 1 wherein said group profile managing server organizes the set of computers to reflect the organization of the company, and underlying physical setup[[set up]], [[such as]] by using identifiers including at least one of PC (personal computer) Name and corporate department including one of sales, marketing, headquarters and location.

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26. (currently amended) The method as defined in claim 25 wherein said PC Names include three letters followed by four digits, said three letters denoting organizational responsibilities of the computer's user, such that said numbers together with the letters uniquely identify one or both of a particular computer and the computer's user.

27. (new) A method of operating a profile group managing server for managing a computer information database comprising:

receiving, at said profile group managing server, from each computer in a set of computers, for inclusion in the database, computer profile data from the set of computers;

determining, by said profile group managing server, a multiple node tree structure of groups for the set of computers, in which each node is a group level and a top level is a root, based on primary grouping criteria and secondary grouping criteria that correspond to selected computer profile data for each computer, said computer profile data including one or more of hardware and software configuration, hot fixes, user defined entries and performance data;

specifying in a group mapping table in the computer information database, one or more fields for the primary grouping criteria and one or more fields for the secondary grouping criteria wherein said secondary grouping criteria is related or unrelated to said primary grouping criteria, and including in the one or more fields of the primary grouping criteria and secondary grouping criteria, in respective table records of the group mapping table, values corresponding to the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria with the values associated with either or both of the primary grouping criteria

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and the secondary grouping criteria being ranges that extend between a selected high value and a selected low value,

wherein said ranges are inclusive and include the high value, the low value and values there between wherein said values there between include all values that are less than the high value, but greater than the low value,

wherein said ranges are inclusive and include the high value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value,

wherein said ranges are inclusive and include the low value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value, or

wherein said ranges are inclusive and only include values there between, wherein said values there between include all values that are less than the high value, but greater than the low value;

further specifying, in the respective table records, information that identifies groups to which the computers that satisfy the primary and secondary criteria are assigned;

for the computer profile data received from a given computer, the profile group managing server performs the following:

extracting the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria,

querying the group mapping table to determine if the extracted computer profile data correspond to or fall within the ranges of the values that are included in the one or

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more fields of the primary grouping criteria and the one or more fields of the secondary grouping criteria in any of the records in the group mapping table,  
and

if the querying provides query results with no records, assigning the computer to a default group,

if the querying provides query results with one table record, assigning the computer to the group that is named in the record,

if the querying provides query results with multiple table records that include a secondary low value, assigning the computer to the group that is named in the record that is in a first predetermined position in an order in which the records are returned, or

if the querying provides query results with multiple records and there is no corresponding secondary low value in the records, assigning the computer to the group that is named in the record that is in a second predetermined position in an order in which the records are returned; and

manipulating the computer profile data from the database and producing, for a selected group level, reports that contain summaries of certain or all of the attributes of the computers that are in the selected group level or below in the multiple node tree structure.

***Allowable Subject Matter***

7. Claims 1-7, 10, 13-15, 19-20, and 23-27 are allowed.
8. The following is a statement of reasons for the indication of allowable subject matter.

With respect to the independent claims, the prior art of record, single or in combination, does not teach or fairly suggest the step of: wherein the calculation of the degrees of relatedness is realized by the steps of: “A. determining, by said profile group managing server, a multiple node tree structure of groups for a set of computers, in which each node is a group level and a top level is a root, based on primary grouping criteria and secondary grouping criteria that correspond to selected computer profile data for each computer, said computer profile data including one or more of hardware and software configuration, hot fixes, user defined entries and performance data; B. specifying in a group mapping table in the computer information database, one or more fields for the primary grouping criteria and one or more fields for the secondary grouping criteria wherein said secondary grouping criteria is unrelated or related to said primary grouping criteria, and including in the one or more fields of the primary grouping criteria and secondary grouping criteria, in respective table records of the group mapping table, values corresponding to the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria with the values associated with either or both of the primary grouping criteria and the secondary grouping criteria being ranges that extend between a selected high value and a selected low value, wherein said ranges are inclusive and include the high value, the low value, and values there between, wherein said values there between include all values that are less than the high value, but greater than the low value, wherein said ranges are inclusive and include the high value and the values there between, wherein said values there between include all values that are less than the high value, but greater than the low value, wherein said ranges are inclusive and include the low value and the values there between,

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wherein said values there between include all values that are less than the high value, but greater than the low value, or wherein said ranges are inclusive and only include values there between, wherein said values there between include all values that are less than the high value, but greater than the low value; E. for the computer profile data received from a given computer, the profile group managing server performs the following: extracting the selected computer profile data that are utilized in the primary grouping criteria and the secondary grouping criteria, querying the group mapping table to determine if the extracted computer profile data correspond to or fall within the ranges of the values that are included in the one or more fields of the primary grouping criteria and the one or more fields of the secondary grouping criteria in any of the records in the group mapping table, and if the querying provides query results with no records, assigning the computer to a default group, if the querying provides query results with one table record, assigning the computer to the group that is named in the record, if the querying provides query results with multiple table records that include a secondary low value, assigning the computer to the group that is named in the record that is in a first predetermined position in an order in which the records are returned, or if the querying provides query results with multiple records and there is no corresponding secondary low value in the records, assigning the computer to the group that is named in the record that is in a second predetermined position in an order in which the records are returned;”, in combination with the other claimed limitations.

Independent claims 7, 20, and 27 are of different scope; however recite similar limitations and are therefore allowed. Dependent claims are allowed for being dependent to an allowed claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PHAM whose telephone number is (571)272-3924. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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